



## Solid carbide milling cutters, uncoated, Ø e8 DC: 20mm



### Order data

|              |               |
|--------------|---------------|
| Order number | 202239 20     |
| GTIN         | 4045197965028 |
| Item class   | 12X           |

### Description

#### Version:

**Eccentric relief ground**, additionally **finish ground** in the flutes for **outstanding chip evacuation** in long-chipping aluminium workpieces.

#### Application:

For roughing and finishing.

### Technical description

|   |                                  |
|---|----------------------------------|
| Feed $f_z$ for slot milling in short-chipping aluminium | 0.085 mm                         |
| Shank   | DIN 6535 HA to h6                |
| Tolerance nominal Ø                                     | e8                               |
| Cutting edge Ø $D_c$                                    | 20 mm                            |
| Flute length $L_c$                                      | 40 mm                            |
| Overall length $L$                                      | 126 mm                           |
| Shank Ø $D_s$   | 20 mm                            |
| Overhang length $L_1$ incl. recess                      | 70 mm                            |
| Helix angle   | 45 degrees                       |
| Recess Ø $D_1$  | 19.5 mm                          |
| Feed $f_z$ for side milling in short-chipping aluminium | 0.12 mm                          |
| No. of teeth $Z$  | 3                                |
| Direction of infeed                                     | horizontal, oblique and vertical |

|   |                                      |
|---|--------------------------------------|
| Corner chamfer angle                      | 90 degrees                           |
| Coating                                   | uncoated                             |
| Tool material                             | Solid carbide                        |
| Standard                                  | Manufacturer's standard              |
| Type                                      | W                                    |
| Cutting width $a_e$ for milling operation | Full slot cutting depth $1 \times D$ |
| Cutting width $a_e$ for milling operation | $0.5 \times D$ for side milling      |
| Through-coolant                           | no                                   |
| Colour ring                               | yellow                               |
| Type of product                           | End / face mill                      |

## User data

|                            | Suitability                               | $V_c$     | ISO code |
|----------------------------|---|-----------|----------|
| Aluminium                  | Suitable                                  | 170 m/min | N        |
| Aluminium (short chipping) | suitable                                  | 140 m/min | N        |
| Alu > 10% Si               | suitable                                  | 105 m/min | N        |
| PMMA acrylic               | Suitable                                  | 160 m/min | N        |
| PE-HD                      | Suitable                                  | 110 m/min | N        |
| PA 66                      | Suitable                                  | 130 m/min | N        |
| PEEK                       | Suitable                                  | 110 m/min | N        |
| PF 31                      | Suitable                                  | 90 m/min  | N        |
| Honeycomb sandwich         | suitable only under restricted conditions | 160 m/min | N        |
| Cu                         | Suitable                                  | 120 m/min | N        |
| CuZn                       | Suitable                                  | 150 m/min | N        |
| wet maximum                | suitable                                  |           |          |
| wet minimum                | suitable only under restricted conditions |           |          |

|                        |   |
|------------------------|---|
| dry                    | Suitable only under restricted conditions |
| Air                    | suitable only under restricted conditions |
| <b>Services</b>        |   |
| Shank grinding Type HB | 129100 HB                                 |